PRINTED ON RECYCLED

AMPAD
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

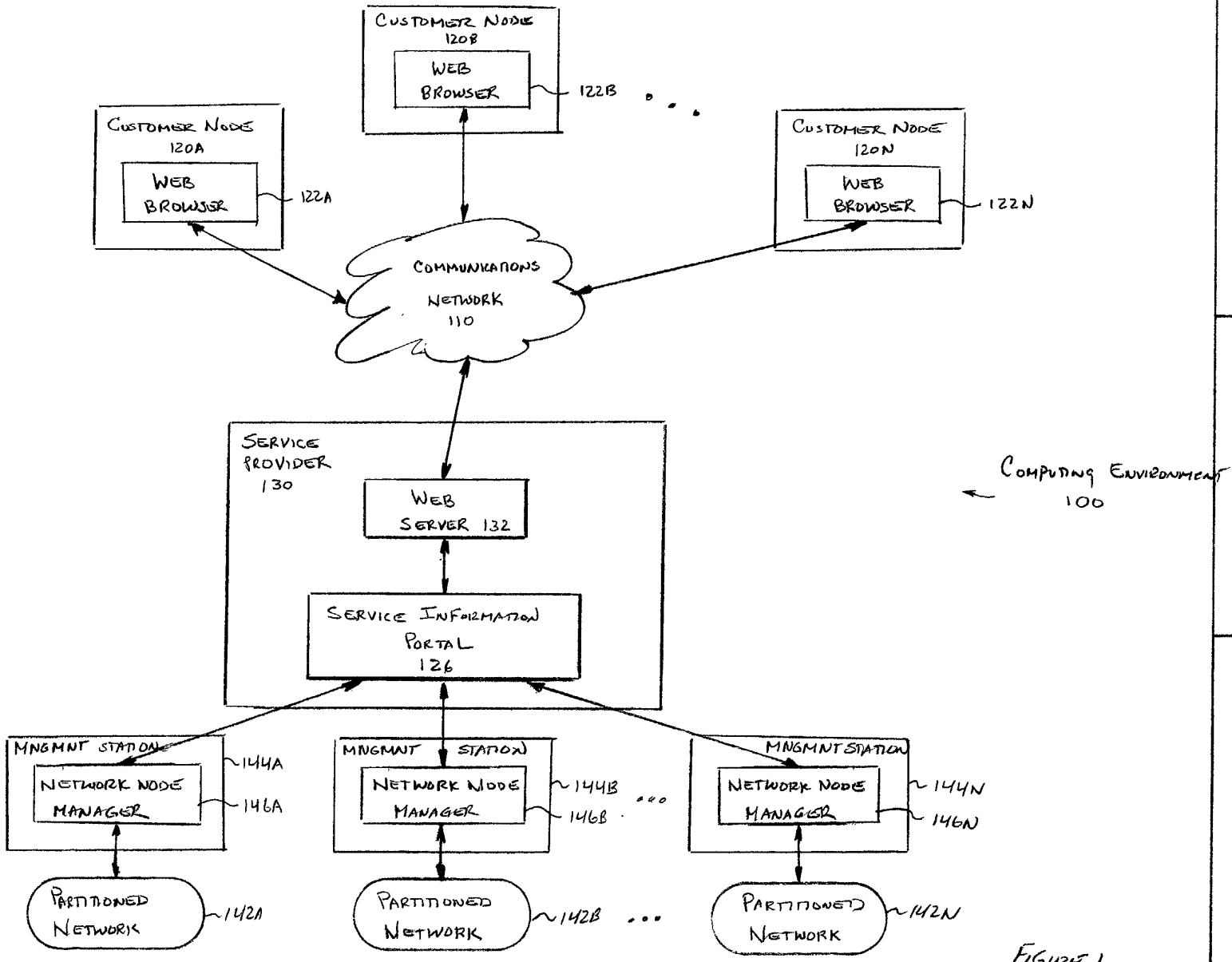


FIGURE 1

FOLDED DESIGNS

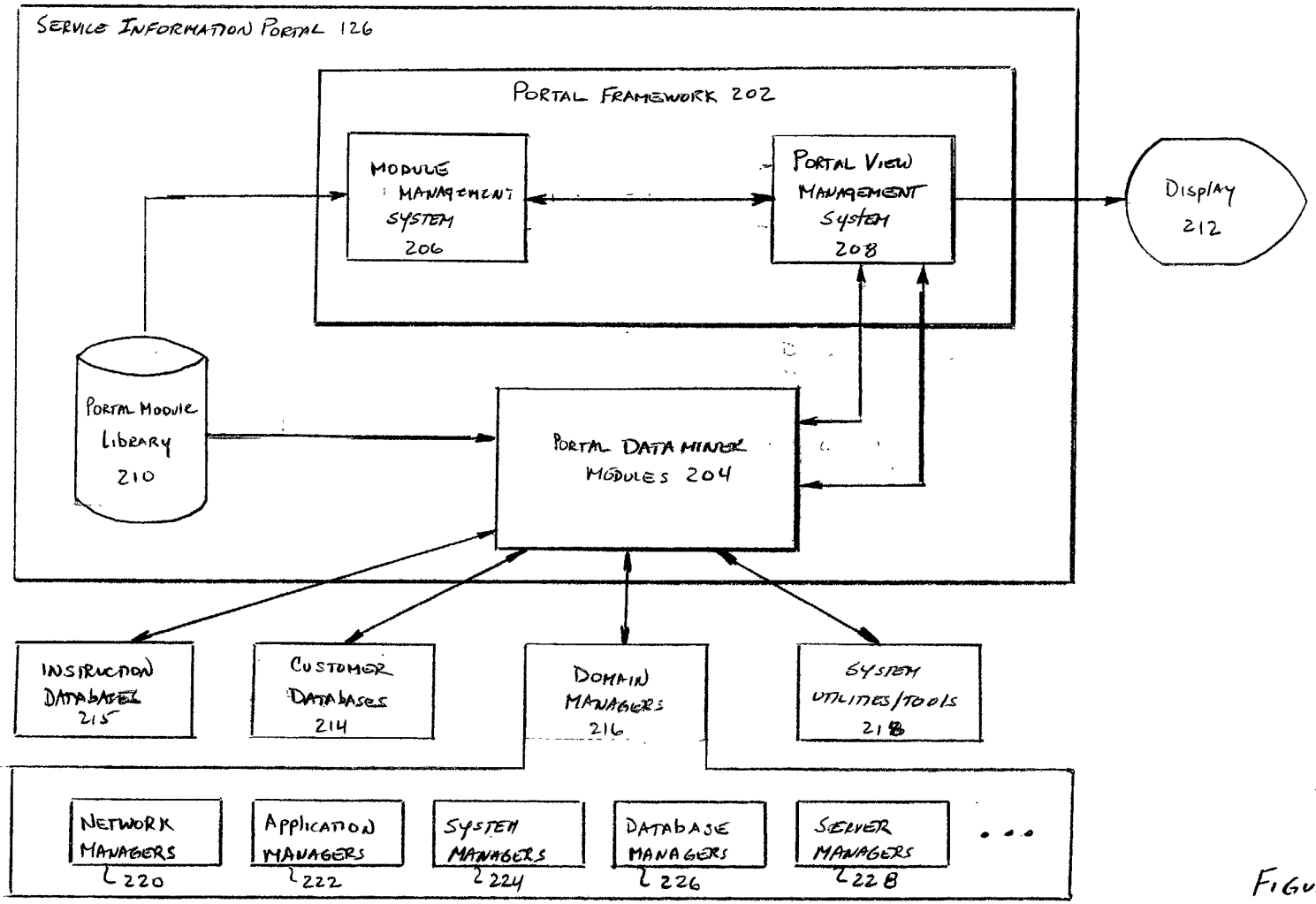


FIGURE 2

AMPAD
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

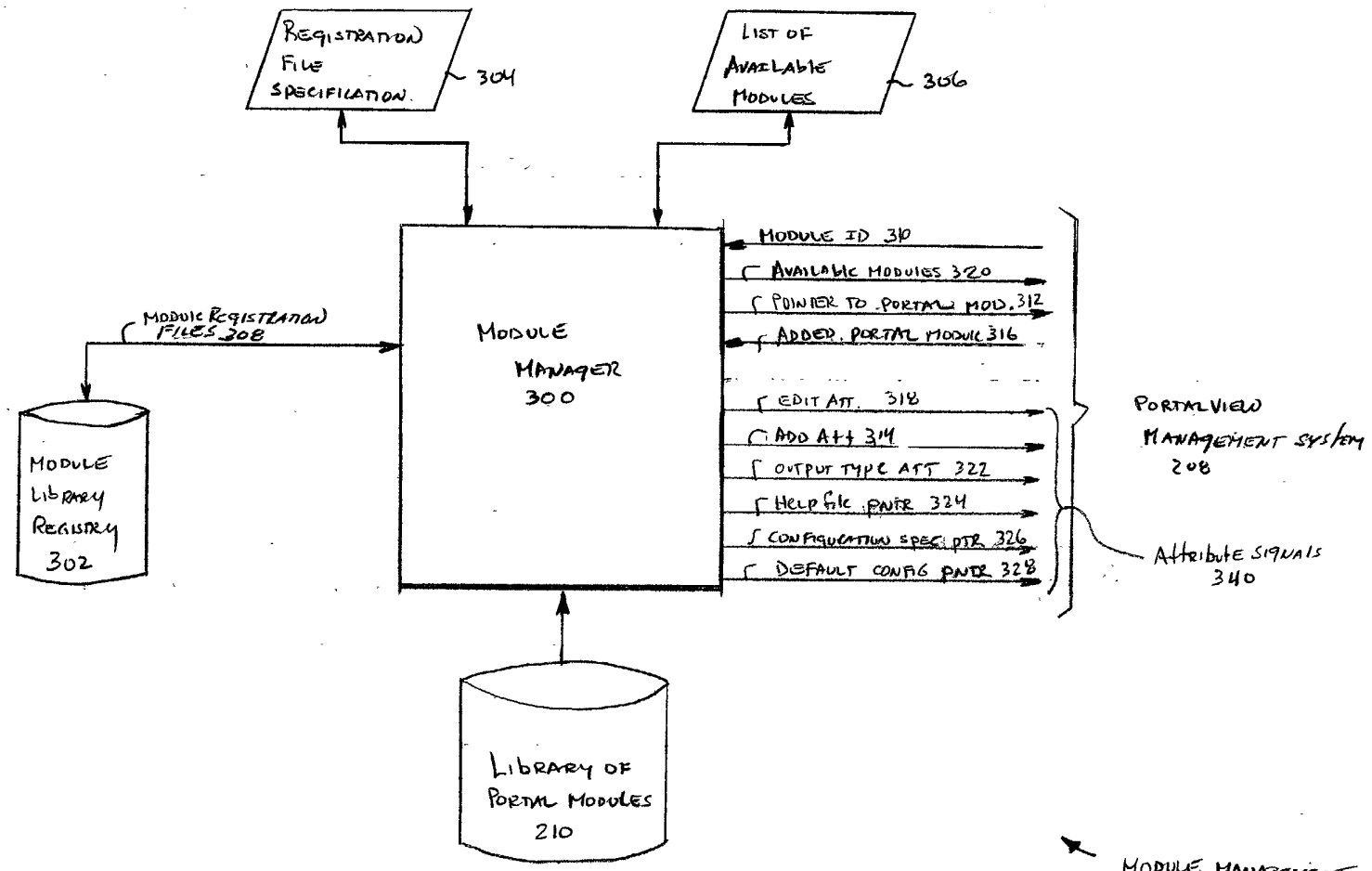


FIGURE 3A

AMPAD
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

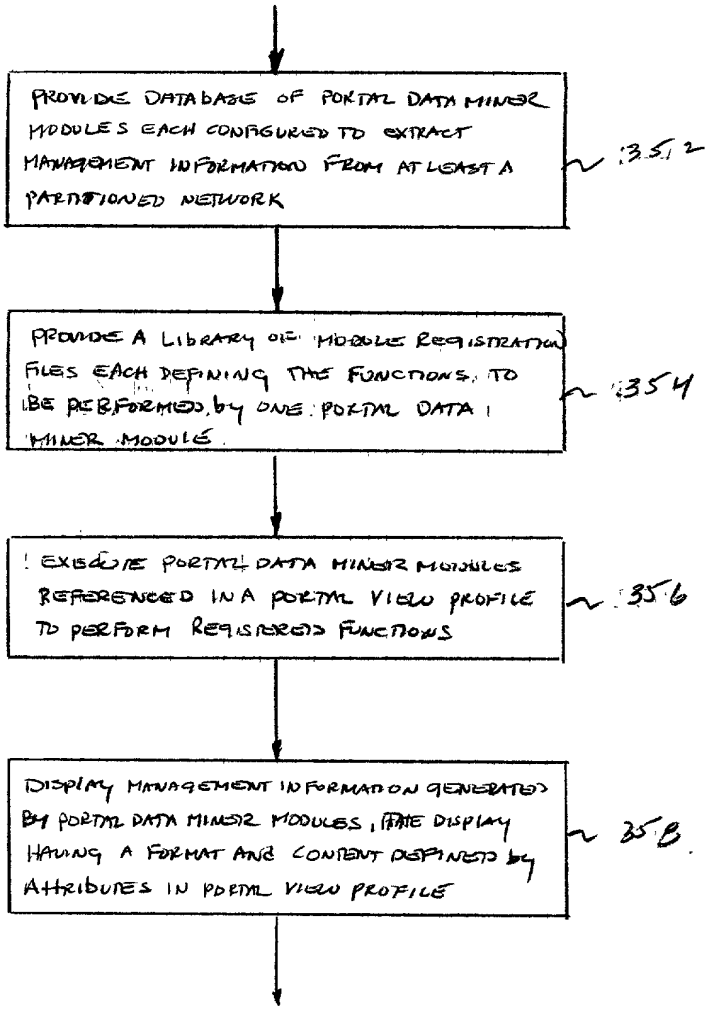

PROVIDE DATABASE OF PORTAL DATA MINER MODULES EACH CONFIGURED TO EXTRACT MANAGEMENT INFORMATION FROM AT LEAST A PARTITIONED NETWORK
352
PROVIDE A LIBRARY OF MODULE REGISTRATION FILES EACH DEFINING THE FUNCTIONS TO BE PERFORMED BY ONE PORTAL DATA MINER MODULE
354
EXECUTE PORTAL DATA MINER MODULES REFERENCED IN A PORTAL VIEW PROFILE TO PERFORM REGISTERED FUNCTIONS
356
DISPLAY MANAGEMENT INFORMATION GENERATED BY PORTAL DATA MINER MODULES, THE DISPLAY HAVING A FORMAT AND CONTENT DEFINED BY ATTRIBUTES IN PORTAL VIEW PROFILE
358

FIGURE 3B

Module Registration File Specification 400

```
1  <!-- OVModuleRegistration.dtd -->
2  <!-- Copyright (c) 2000 Hewlett-Packard
3  Company -->
4  <!-- $Revision: /main/BACCHUS/8 $ -->
5  <!-- $Date: 2001/03/15 00:13 UTC $ -->
6
7  <!ELEMENT ModuleRegistration EMPTY>
8
9  <!ATTLIST ModuleRegistration
10        vendorName              CDATA #IMPLIED
11        vendorURL               CDATA #IMPLIED
12        description             CDATA #IMPLIED
13        version                 CDATA #IMPLIED
14        category                CDATA "General"
15        title                   CDATA #IMPLIED
16        classid                 ID    #REQUIRED
17        implementation          CDATA #REQUIRED
18        outputType
19 (narrow|NARROW|wide|WIDE|any|ANY) "narrow"
20        add
21 (1|0|YES|yes|NO|no) "no"
22        edit
23 (1|0|YES|yes|NO|no) "no"
24        help                    CDATA #IMPLIED
25        configDTD               CDATA #IMPLIED
26        defaultConfigXML        CDATA #IMPLIED>
```

Header Data 402

404

Attribute List 406

Figure 4

NETWORK HEALTH
MODULE REGISTRATION FILE
500

```
1  <?xml version="1.0" standalone="no"?>
2  <!DOCTYPE ModuleRegistration SYSTEM
3  "OVModuleRegistration.dtd">
4  <ModuleRegistration
5      vendorName  ="Hewlett-Packard
6                   Company"
7      vendorURL   ="http://www.
8                   openview.hp.com"
9      description ="HP OpenView SIP Network
10                  Device Health Module"
11     version     ="2.0"
12     category    ="NNM"
13     title       ="Network Device
14                  Health"
15     classid     ="com.hp.ov.portal.
16                  modules.health"
17     implementation
18                 ="/servlet/com.hp.ov.
19                  portal.modules.health.
20                  HealthServlet"
21     outputType  ="narrow"
22     add         ="yes"
23     edit        ="yes"
24     help        ="/OvSipDocs/C/help/
25                  NNM/healthView.html"
26     configDTD   ="OVNetworkHealth.dtd"
27     defaultConfigXML
28                  ="defaults/
29                   OVDefaultNetHealth.
30                   xml"
31 />
```

FIGURE 5

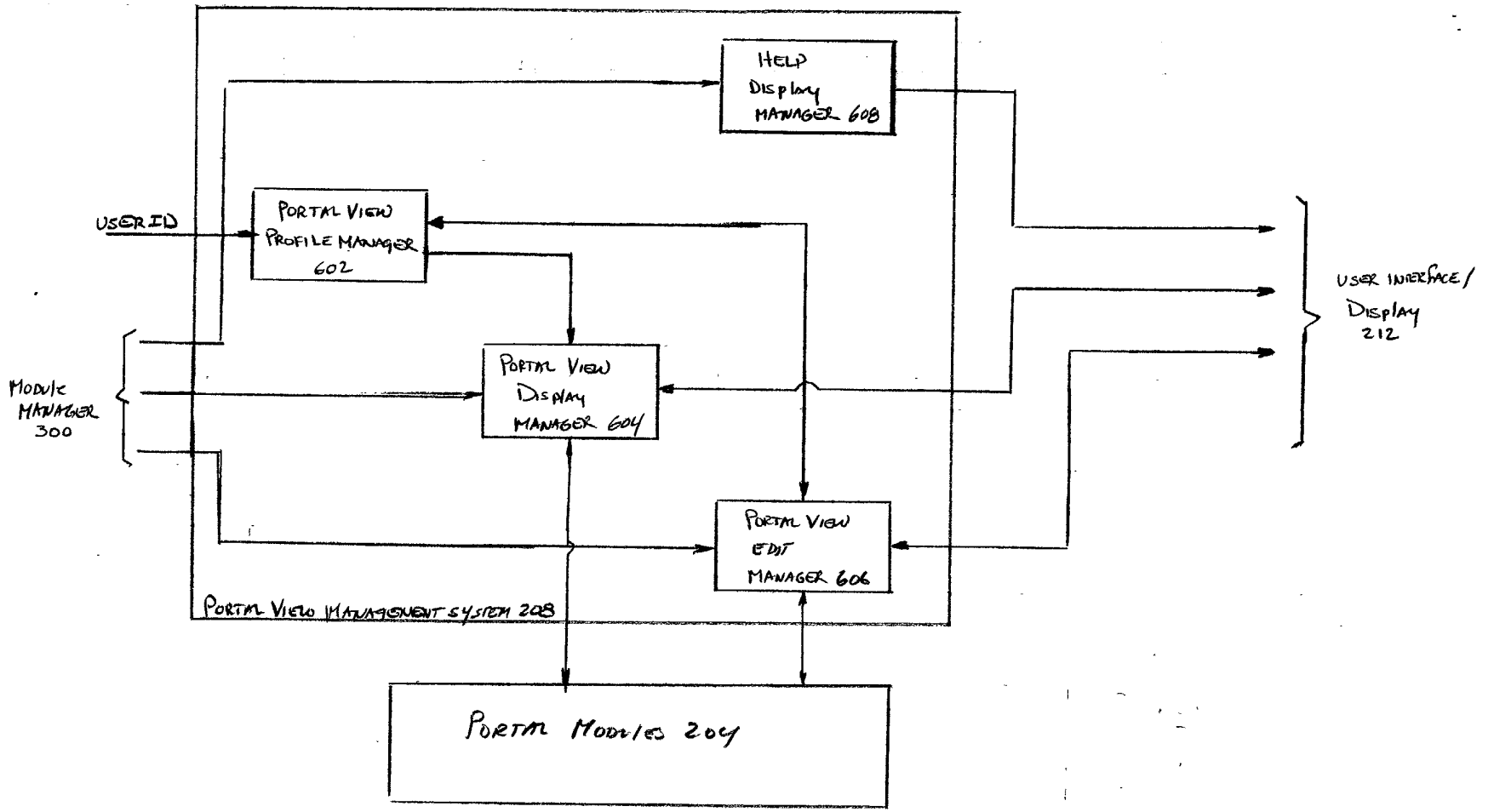


FIGURE 6

AMPAD
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

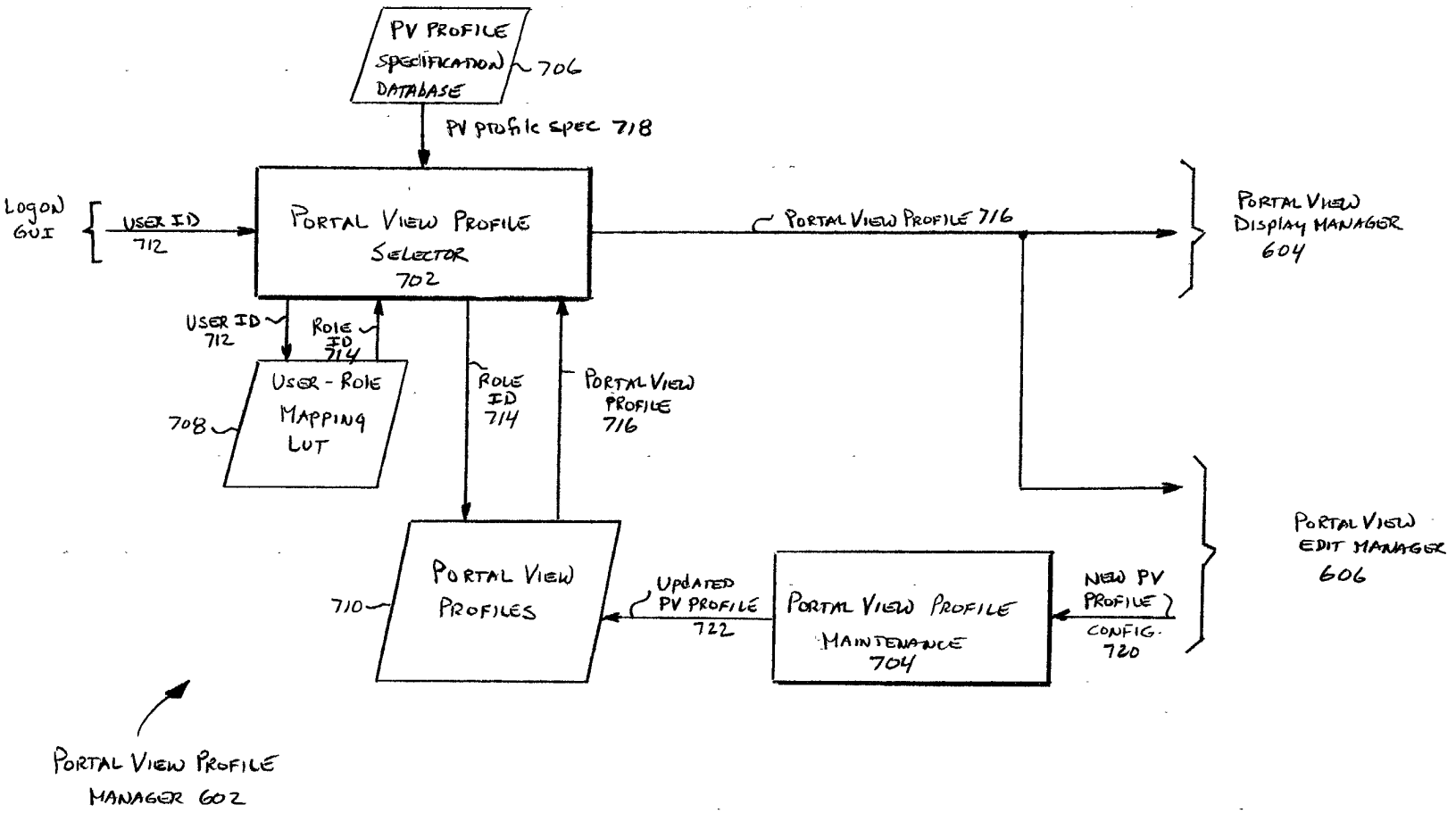


FIGURE 7

AMPAD
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD
PRINTED IN U.S.A.

PORTAL VIEW PROFILE 800

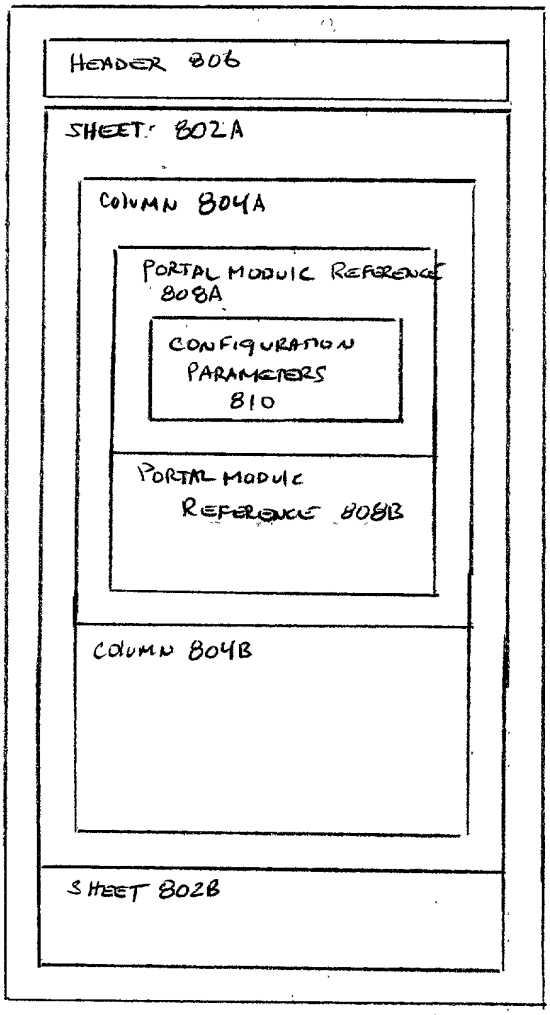


FIGURE 8

NETWORK HEALTH PORTAL VIEW PROFILE SPECIFICATION
900

```
1  <!-- OVNetworkHealth.dtd
2  <!-- Copyright (c) 2000 Hewlett-Packard
3  Company
4  <!-- $Revision: /main/BACCHUS/7 $
5  <!-- $Date: 2001/04/11 20:41 UTC $
6  <!--
7  <!ELEMENT NetworkHealth (Summary+)>
8  <!ATTLIST NetworkHealth
9       showRawData   (yes|no|YES|NO|1|0) "no"
10      showUnknown   (yes|no|YES|NO|1|0) "no"
11 >
12
13 <!ELEMENT Summary (Component+,
14 (NodeSelection | InterfaceSelection))>
15 <!ATTLIST Summary
16      id          CDATA #REQUIRED
17      title       CDATA #REQUIRED
18      display     (yes|no|YES|NO|1|0) "yes"
19      displayDepth (1|2|3) "3"
20 >
```

HEADER 902

NETWORK HEALTH ELEMENT SPEC. 904

SUMMARY ELEMENT SPEC. 906

FIGURE 9.

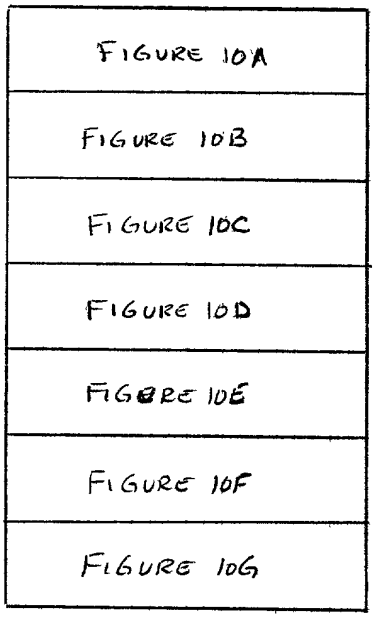


FIGURE 10A
FIGURE 10B
FIGURE 10C
FIGURE 10D
FIGURE 10E
FIGURE 10F
FIGURE 10G

FIGURE 10

PORTAL VIEW PROFILE
1000

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <!DOCTYPE PortalView SYSTEM
3  "../PortalView.dtd">
4  <PortalView
5  colorScheme="/OvSipDocs/styles/default.css"
6  defaultSheetID="NetworkSheet"
7  refreshRate="5000" showDateTime="yes"
8  showUserName="yes" userName="Any User">
9     <Sheet id="NetworkSheet" title="Network">
10       <Column width="narrow">
11          <ModuleInstance
12 classid="com.hp.ov.portal.modules.health"
13 display="yes" id="NetworkHealth"
14 rollupState="down">
15             <NetworkHealth showRawData="no"
16 showUnknown="no">
17                <Summary display="no"
18 displayDepth="3" id="InterfaceHealth"
19 title="Interface Health">
20                   <Component href="#IfStatus"
21 vital="yes" weight="2"/>
22                   <Component href="#IfUtil"
23 vital="no" weight="1"/>
24                   <Component href="#IfInErrors"
25 vital="no" weight="1"/>
26                   <Component
27 href="#IfOutErrors" vital="no" weight="1"/>
28                   <InterfaceSelection
29 id="AllInterfaces" op="AND" title="All
30 Interfaces"/>
31                </Summary>
```

HEADER 1002

PORTAL VIEW WINDOW ATTRIBUTES 1004

PORTAL MODULE REFERENCE 1006A

FIGURE 10A

PORTAL VIEW PROFILE
1000

PORTAL MODULE REFERENCE 1006A (CONT)

```
32                  <Summary display="yes"
33 displayDepth="3" id="RouterHealth"
34 title="Router Health">
35                      <Component href="#IfHealth"
36 vital="no" weight="1"/>
37                      <Component
38 href="#CiscoCpuUtil" vital="no" weight="1"/>
39                      <NodeSelection id="Routers"
40 op="AND" title="Routers">
41                          <CapabilityFilter op="OR">
42                              <Capability
43 field="isRouter" value="true"/>
44                          </CapabilityFilter>
45                      </NodeSelection>
46                  </Summary>
47                  <Summary display="no"
48 displayDepth="3" id="KeyDeviceHealth"
49 title="Key Device Health">
50                      <Component href="#IfHealth"
51 vital="no" weight="1"/>
52                      <NodeSelection
53 id="KeyDevices" op="AND" title="Key Devices">
54                          <CapabilityFilter op="OR">
55                              <Capability
56 field="isKeyDevice" value="true"/>
57                          </CapabilityFilter>
58                      </NodeSelection>
59                  </Summary>
```

FIGURE 10B

PORTAL VIEW PROFILE
1000

```
60                  <Summary display="no"
61 displayDepth="3" id="CPEHealth" title="CPE
62 Health">
63                      <Component href="#IfHealth"
64 vital="no" weight="1"/>
65                      <NodeSelection id="CPE"
66 op="AND" title="Customer Premise Equipment">
67                          <CapabilityFilter op="OR">
68                              <Capability
69 field="isCPE" value="true"/>
70                          </CapabilityFilter>
71                      </NodeSelection>
72                  </Summary>
73                  <Summary display="no"
74 displayDepth="3" id="ServerHealth"
75 title="Server Health">
76                      <Component href="#IfHealth"
77 vital="no" weight="1"/>
78                      <NodeSelection id="Servers"
79 op="AND" title="Servers">
80                          <CapabilityFilter op="OR">
81                              <Capability
82 field="isServer" value="true"/>
83                          </CapabilityFilter>
84                      </NodeSelection>
85                  </Summary>
86              </NetworkHealth>
87          </ModuleInstance>
```

PORTAL MODULE REFERENCE 1006A (CONT)

FIGURE 10C

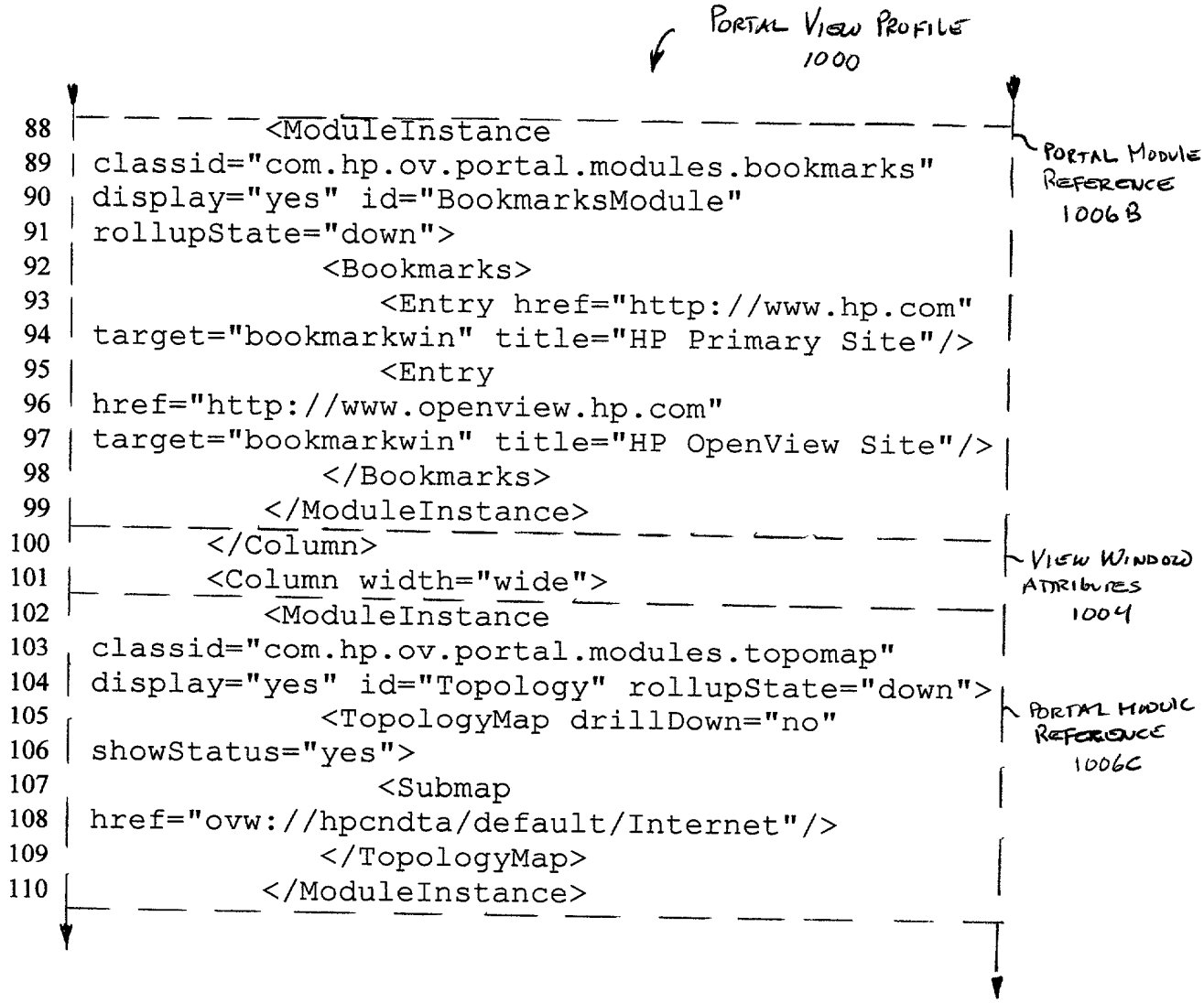

PORTAL VIEW PROFILE
1000
<ModuleInstance
classid="com.hp.ov.portal.modules.bookmarks"
display="yes" id="BookmarksModule"
rollupState="down">
<Bookmarks>
<Entry href="http://www.hp.com"
target="bookmarkwin" title="HP Primary Site"/>
<Entry
href="http://www.openview.hp.com"
target="bookmarkwin" title="HP OpenView Site"/>
</Bookmarks>
</ModuleInstance>
PORTAL MODULE REFERENCE 1006B
</Column>
<Column width="wide">
VIEW WINDOW ATTRIBUTES 1004
<ModuleInstance
classid="com.hp.ov.portal.modules.topomap"
display="yes" id="Topology" rollupState="down">
<TopologyMap drillDown="no"
showStatus="yes">
<Submap
href="ovw://hpcndta/default/Internet"/>
</TopologyMap>
</ModuleInstance>
PORTAL MODULE REFERENCE 1006C

FIGURE 10D

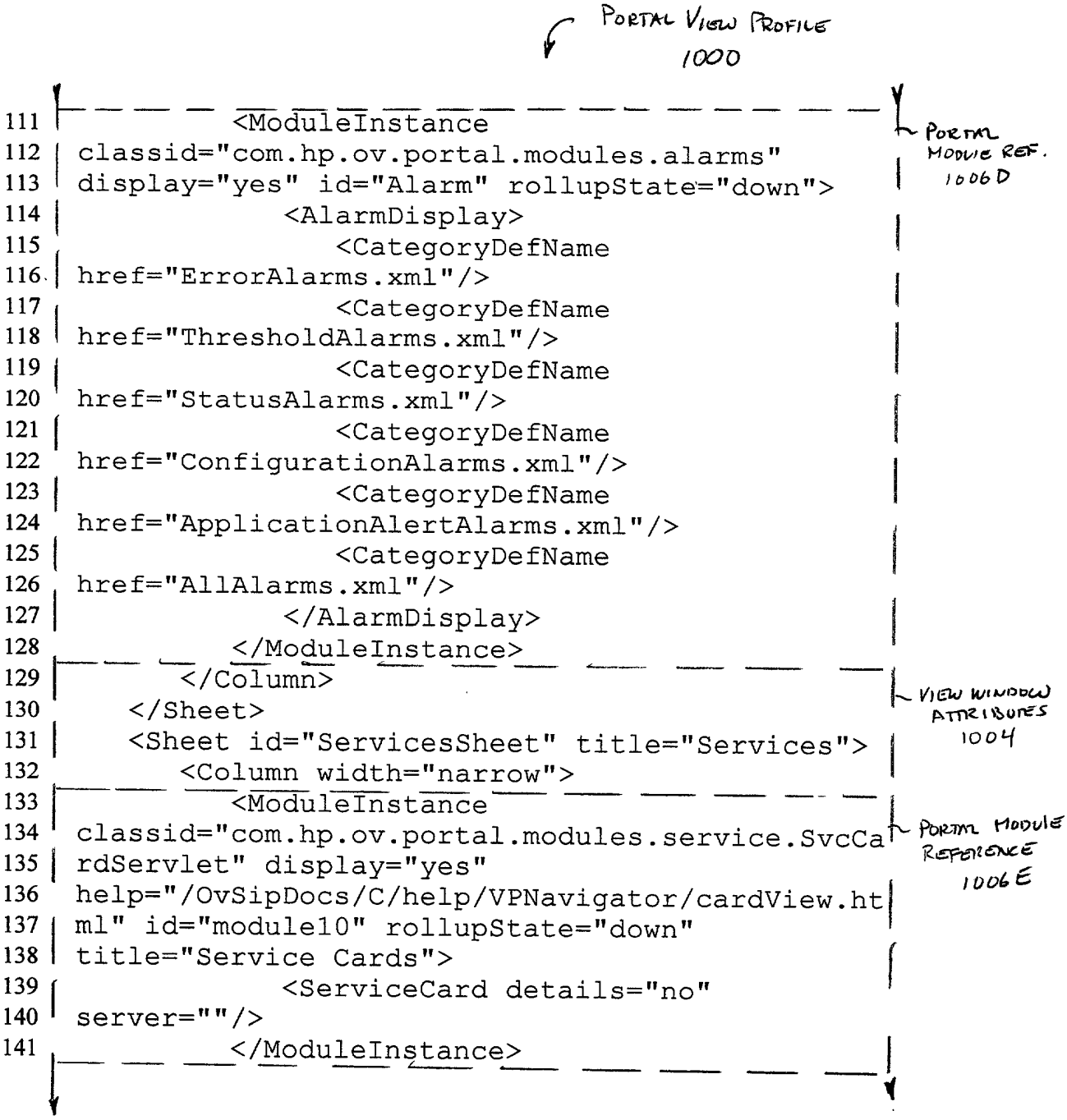

PORTAL VIEW PROFILE
1000
111 <ModuleInstance
112 classid="com.hp.ov.portal.modules.alarms"
113 display="yes" id="Alarm" rollupState="down">
114 <AlarmDisplay>
115 <CategoryDefName
116 href="ErrorAlarms.xml"/>
117 <CategoryDefName
118 href="ThresholdAlarms.xml"/>
119 <CategoryDefName
120 href="StatusAlarms.xml"/>
121 <CategoryDefName
122 href="ConfigurationAlarms.xml"/>
123 <CategoryDefName
124 href="ApplicationAlertAlarms.xml"/>
125 <CategoryDefName
126 href="AllAlarms.xml"/>
127 </AlarmDisplay>
128 </ModuleInstance>
129 </Column>
130 </Sheet>
131 <Sheet id="ServicesSheet" title="Services">
132 <Column width="narrow">
133 <ModuleInstance
134 classid="com.hp.ov.portal.modules.service.SvcCa
135 rdServlet" display="yes"
136 help="/OvSipDocs/C/help/VPNavigator/cardView.ht
137 ml" id="module10" rollupState="down"
138 title="Service Cards">
139 <ServiceCard details="no"
140 server=""/>
141 </ModuleInstance>
PORTAL MODULE REF. 1006D
VIEW WINDOW ATTRIBUTES 1004
PORTAL MODULE REFERENCE 1006E

FIGURE 10E

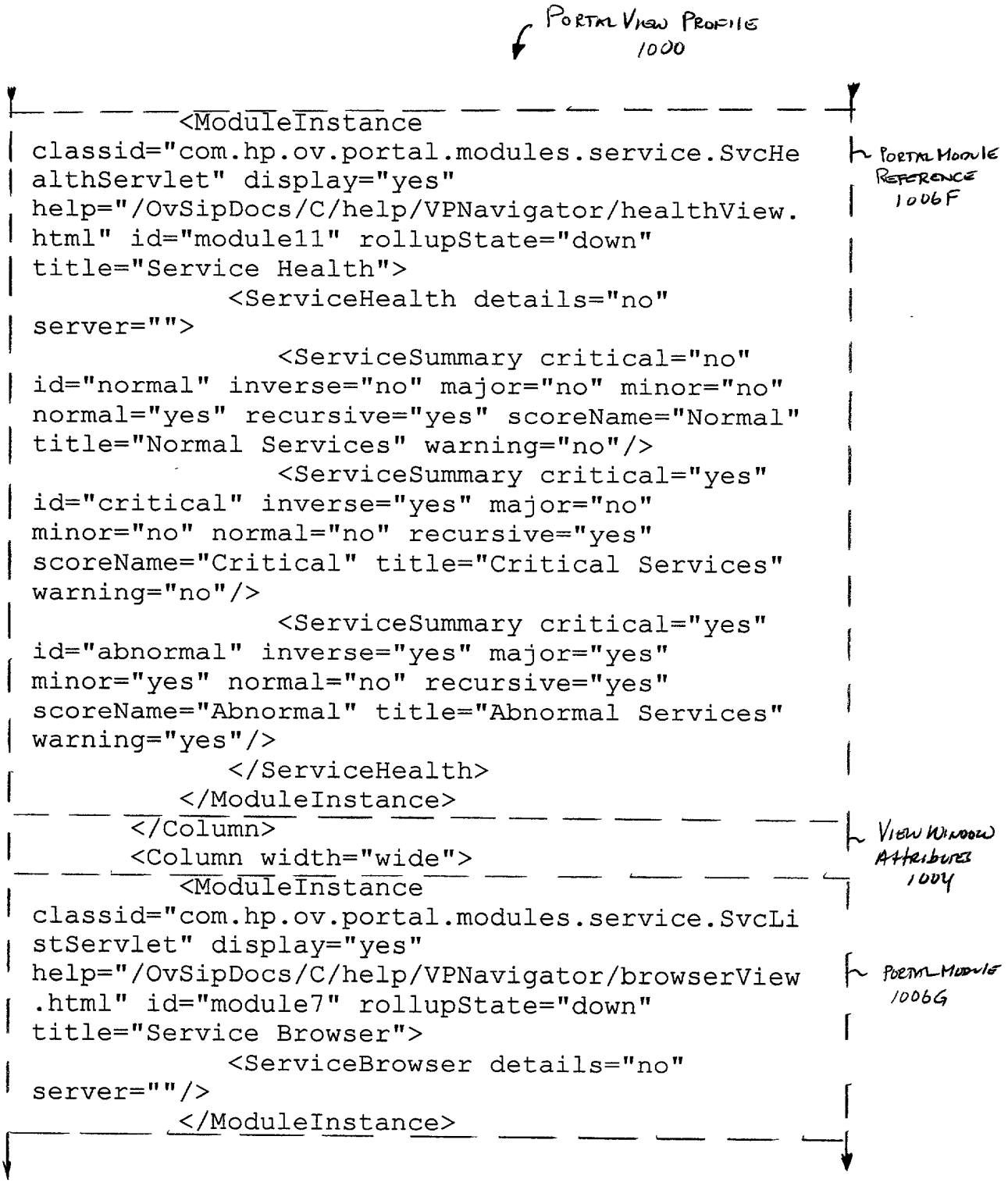

PORTAL VIEW PROFILE
1000
PORTAL MODULE REFERENCE 1006F
VIEW WINDOW ATTRIBUTES 1004
PORTAL MODULE 1006G
142 <ModuleInstance
143 classid="com.hp.ov.portal.modules.service.SvcHe
144 althServlet" display="yes"
145 help="/OvSipDocs/C/help/VPNavigator/healthView.
146 html" id="module11" rollupState="down"
147 title="Service Health">
148 <ServiceHealth details="no"
149 server="">
150 <ServiceSummary critical="no"
151 id="normal" inverse="no" major="no" minor="no"
152 normal="yes" recursive="yes" scoreName="Normal"
153 title="Normal Services" warning="no"/>
154 <ServiceSummary critical="yes"
155 id="critical" inverse="yes" major="no"
156 minor="no" normal="no" recursive="yes"
157 scoreName="Critical" title="Critical Services"
158 warning="no"/>
159 <ServiceSummary critical="yes"
160 id="abnormal" inverse="yes" major="yes"
161 minor="yes" normal="no" recursive="yes"
162 scoreName="Abnormal" title="Abnormal Services"
163 warning="yes"/>
164 </ServiceHealth>
165 </ModuleInstance>
166 </Column>
167 <Column width="wide">
168 <ModuleInstance
169 classid="com.hp.ov.portal.modules.service.SvcLi
170 stServlet" display="yes"
171 help="/OvSipDocs/C/help/VPNavigator/browserView
172 .html" id="module7" rollupState="down"
173 title="Service Browser">
174 <ServiceBrowser details="no"
175 server=""/>
176 </ModuleInstance>

FIGURE 10F

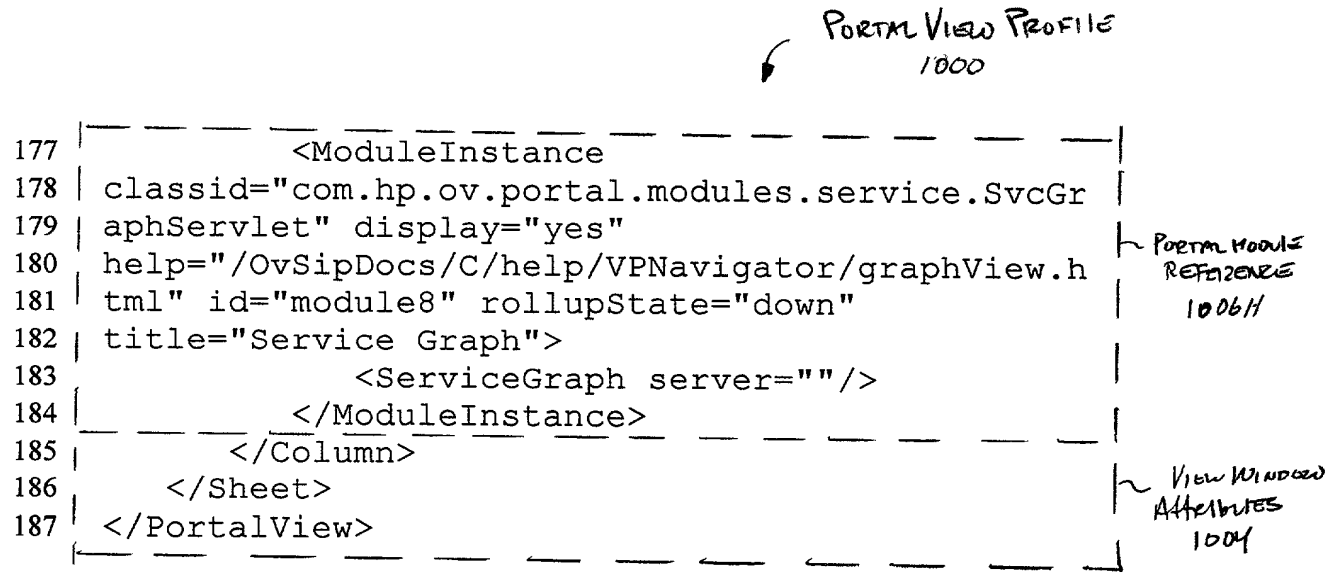

PORTAL VIEW PROFILE
1000
177 <ModuleInstance
178 classid="com.hp.ov.portal.modules.service.SvcGr
179 aphServlet" display="yes"
180 help="/OvSipDocs/C/help/VPNavigator/graphView.h
181 tml" id="module8" rollupState="down"
182 title="Service Graph">
183 <ServiceGraph server=""/>
184 </ModuleInstance>
185 </Column>
186 </Sheet>
187 </PortalView>
PORTAL MODULE REFERENCE
1006N
VIEW WINDOW ATTRIBUTES
1004

FIGURE 10G

PROTECTED DOCUMENT

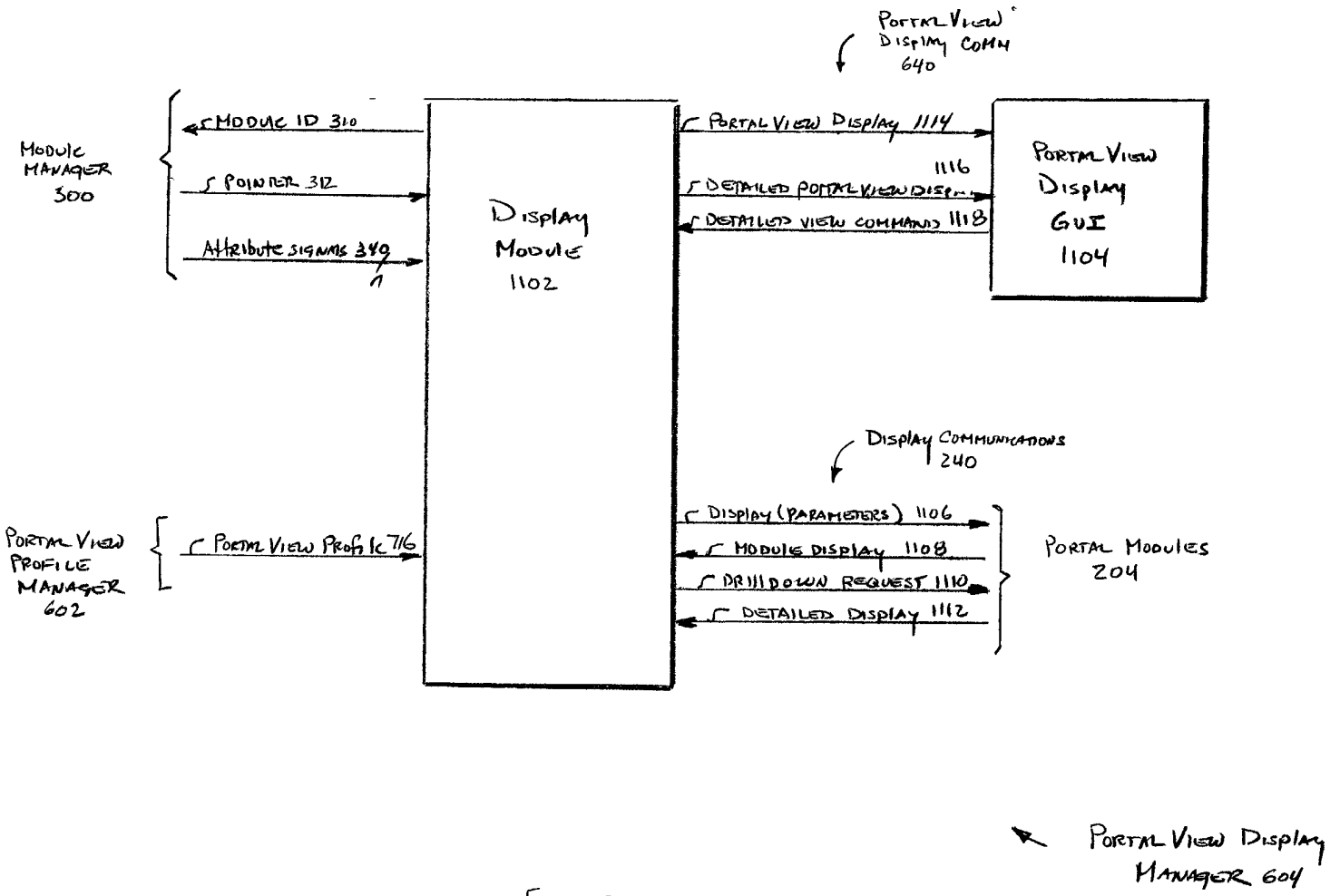


FIGURE 11

AMPAD
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

AMPAD
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

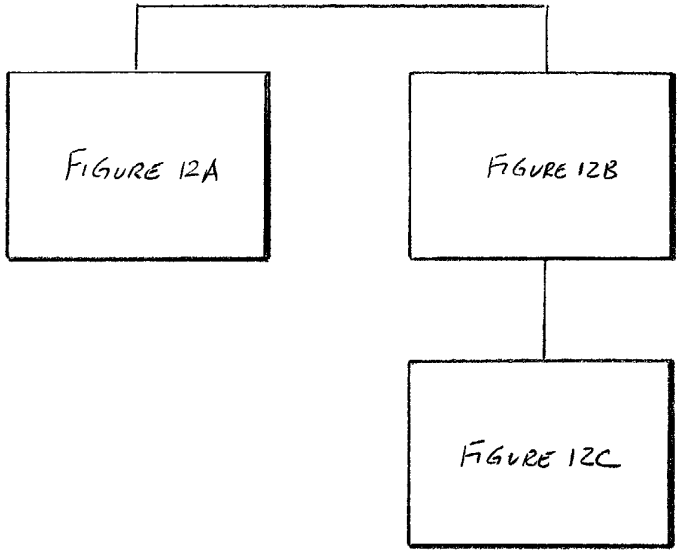
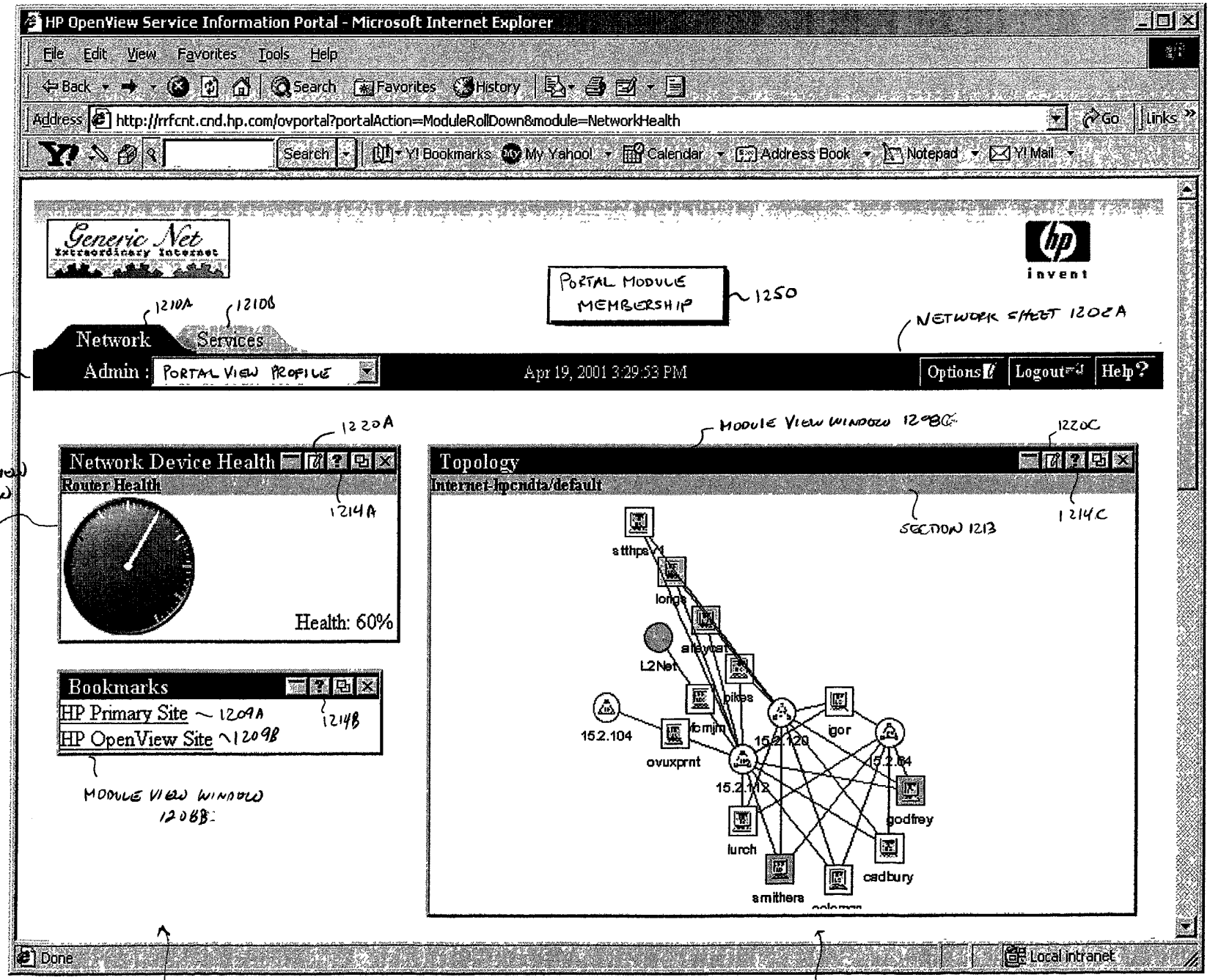


FIGURE 12

PATENT APPLICATION



LEFT COLUMN 1204

FIGURE 12A

RIGHT COLUMN 1206

PRIOR ART REDRAWN

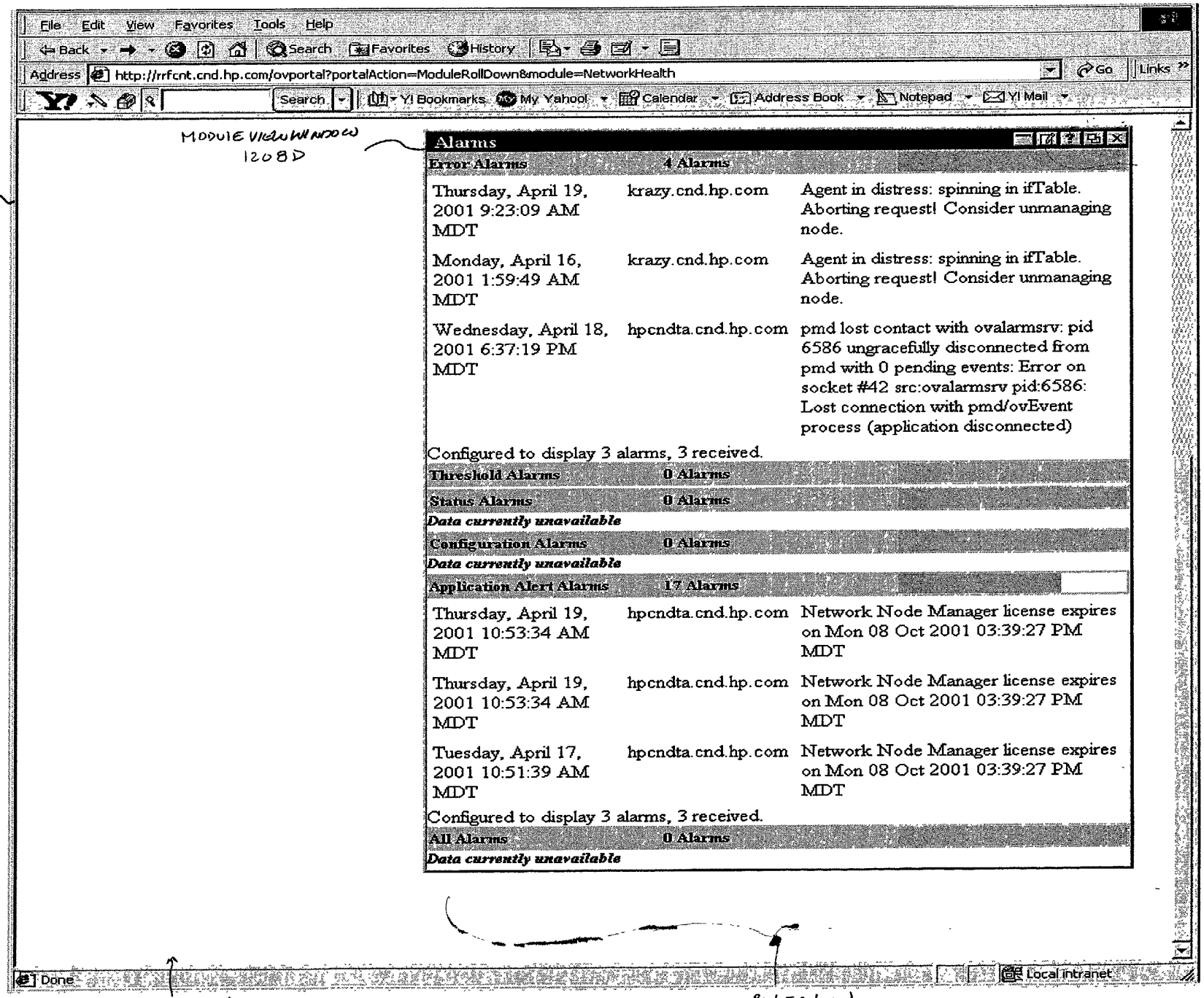
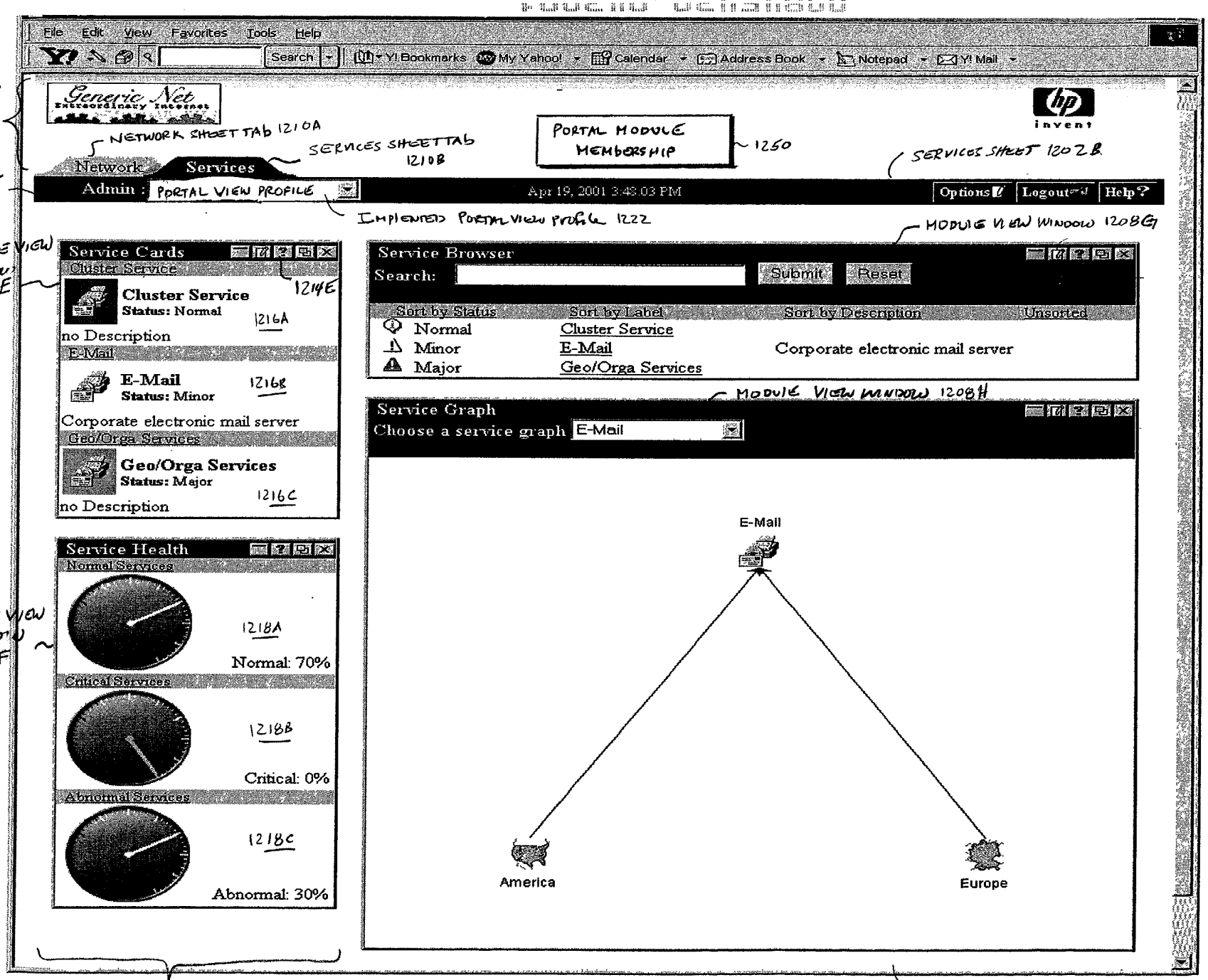


FIGURE 12B



GENERIC REGION 1212

NETWORK SHEET TAB 1210A

SERVICES SHEET TAB 1210B

SERVICES SHEET 1202B

BUMPER 1224

IMPLEMENTED PORTAL VIEW PROFILE 1222

MODULE VIEW WINDOW 1208E

1214E

MODULE VIEW WINDOW 1208G

MODULE VIEW WINDOW 1208H

MODULE VIEW WINDOW 1208F

LEFT COLUMN 1204

RIGHT COLUMN 1206

FIGURE 12C

PRIOR ART

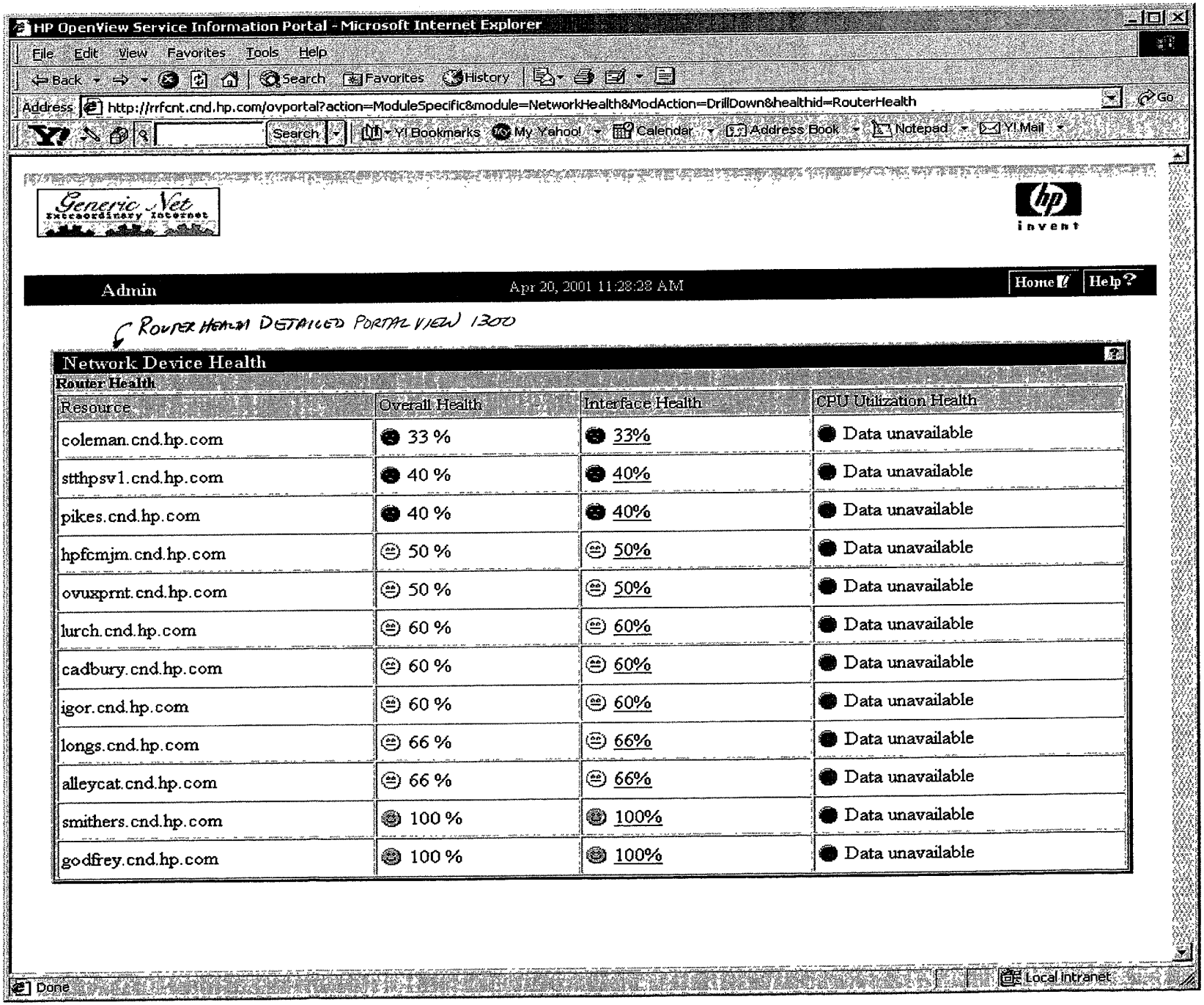


FIGURE 13

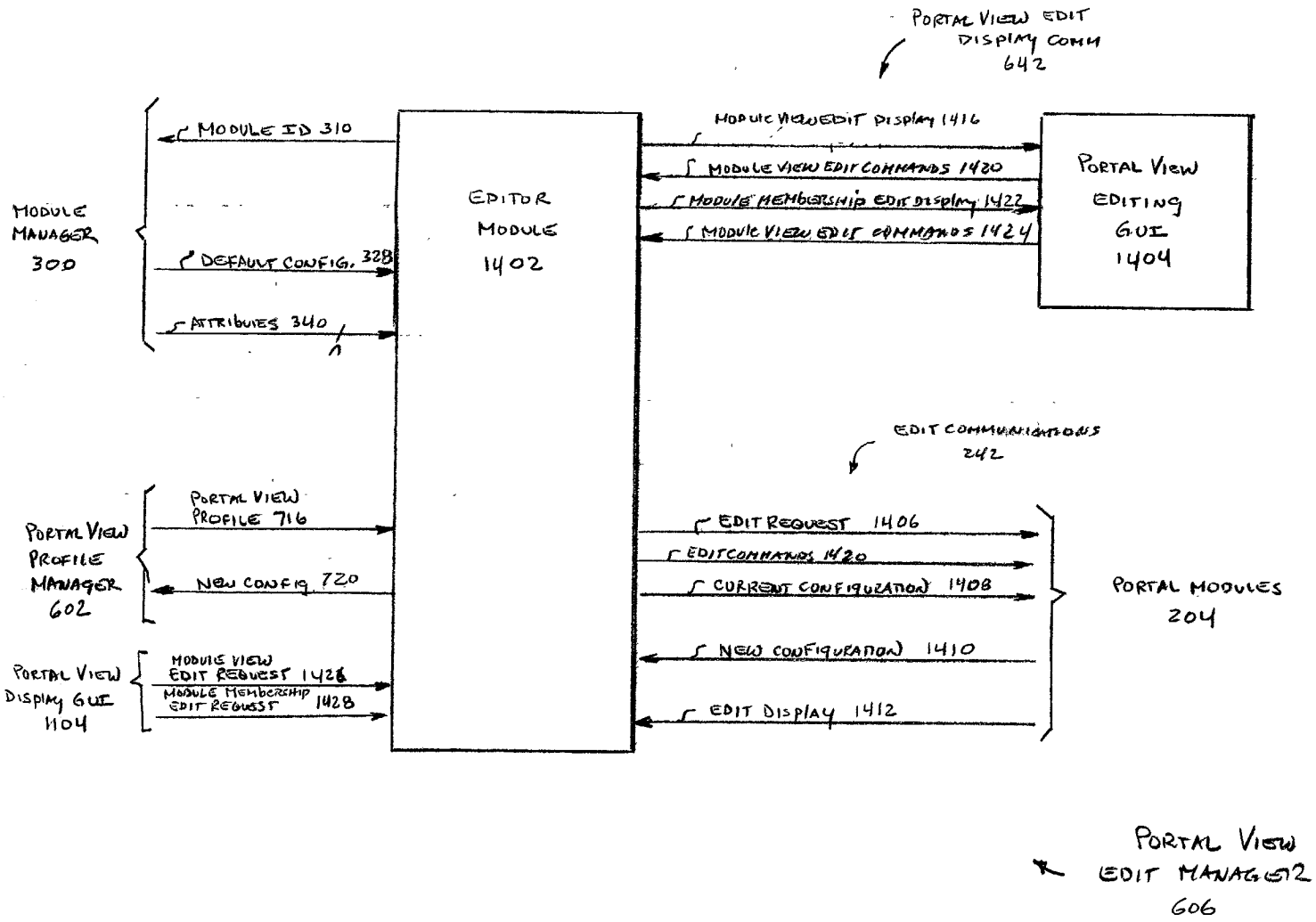


FIGURE 14

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

PROPRIETARY DOCUMENT

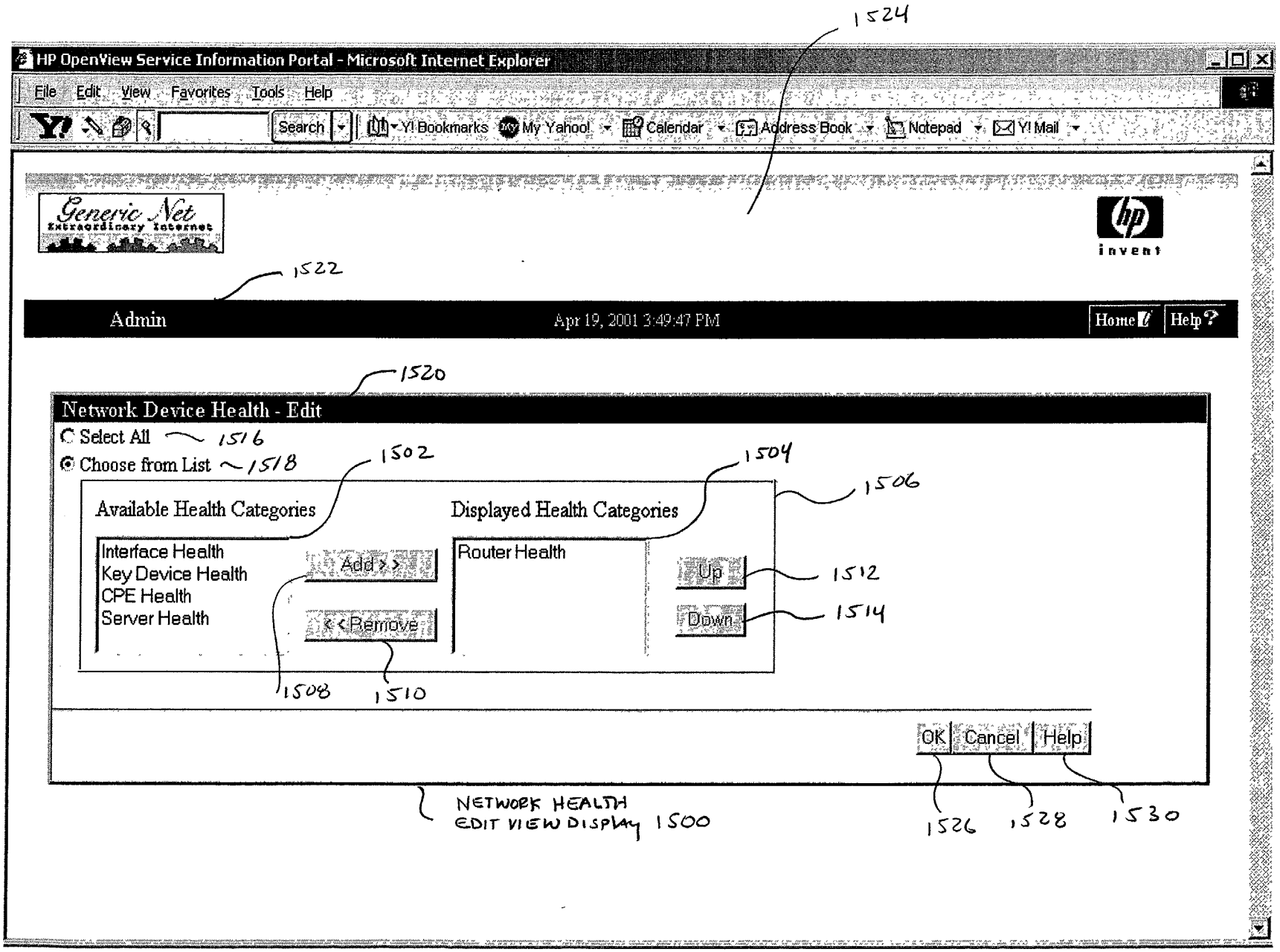
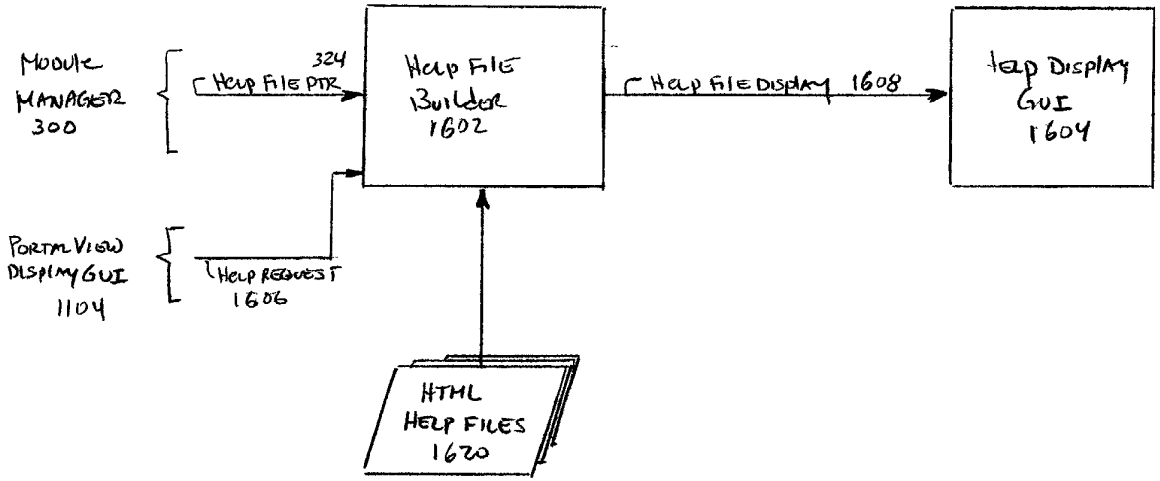


Figure 15



← Help Display Manager 608

FIGURE 16

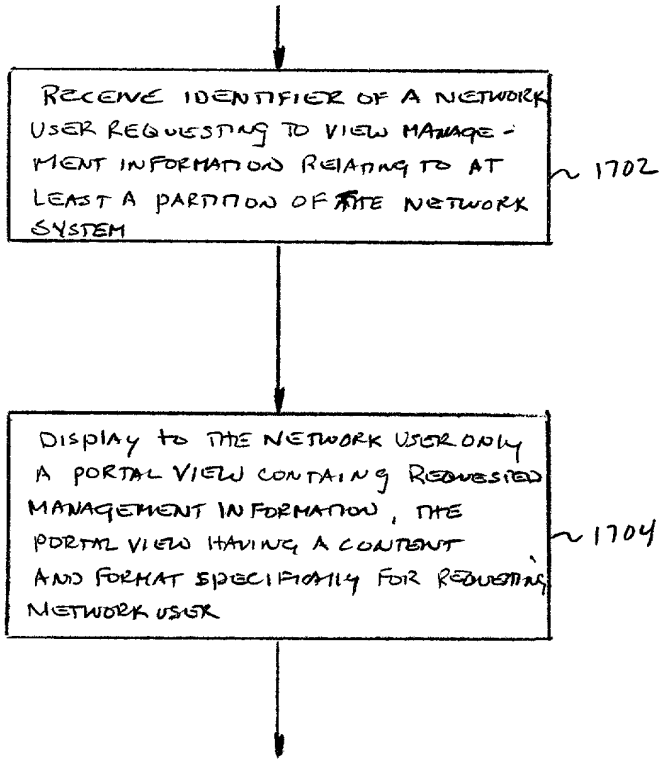

RECEIVE IDENTIFIER OF A NETWORK USER REQUESTING TO VIEW MANAGEMENT INFORMATION RELATING TO AT LEAST A PARTITION OF THE NETWORK SYSTEM
1702
DISPLAY TO THE NETWORK USER ONLY A PORTAL VIEW CONTAINING REQUESTED MANAGEMENT INFORMATION, THE PORTAL VIEW HAVING A CONTENT AND FORMAT SPECIFICALLY FOR REQUESTING NETWORK USER
1704

FIGURE 17

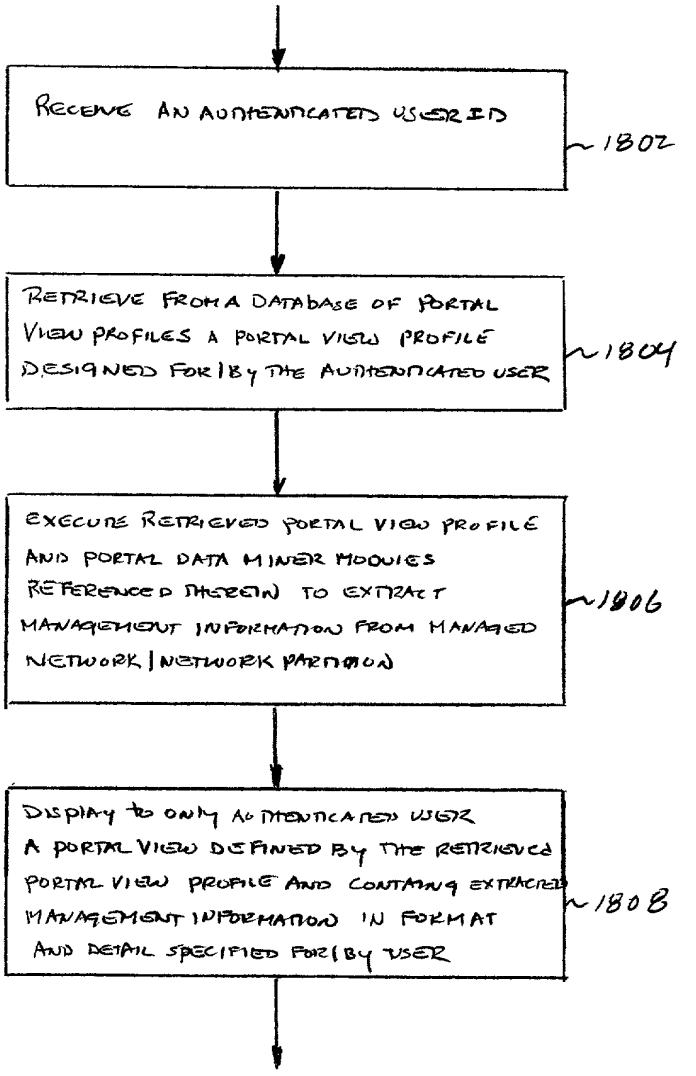

RECEIVE AN AUTHENTICATED USER ID
1802
RETRIEVE FROM A DATABASE OF PORTAL VIEW PROFILES A PORTAL VIEW PROFILE DESIGNED FOR/BY THE AUTHENTICATED USER
1804
EXECUTE RETRIEVED PORTAL VIEW PROFILE AND PORTAL DATA MINER MODULES REFERENCED THEREIN TO EXTRACT MANAGEMENT INFORMATION FROM MANAGED NETWORK/NETWORK PARTITION
1806
DISPLAY TO ONLY AUTHENTICATED USER A PORTAL VIEW DEFINED BY THE RETRIEVED PORTAL VIEW PROFILE AND CONTAINING EXTRACTED MANAGEMENT INFORMATION IN FORMAT AND DETAIL SPECIFIED FOR/BY USER
1808

FIGURE 18

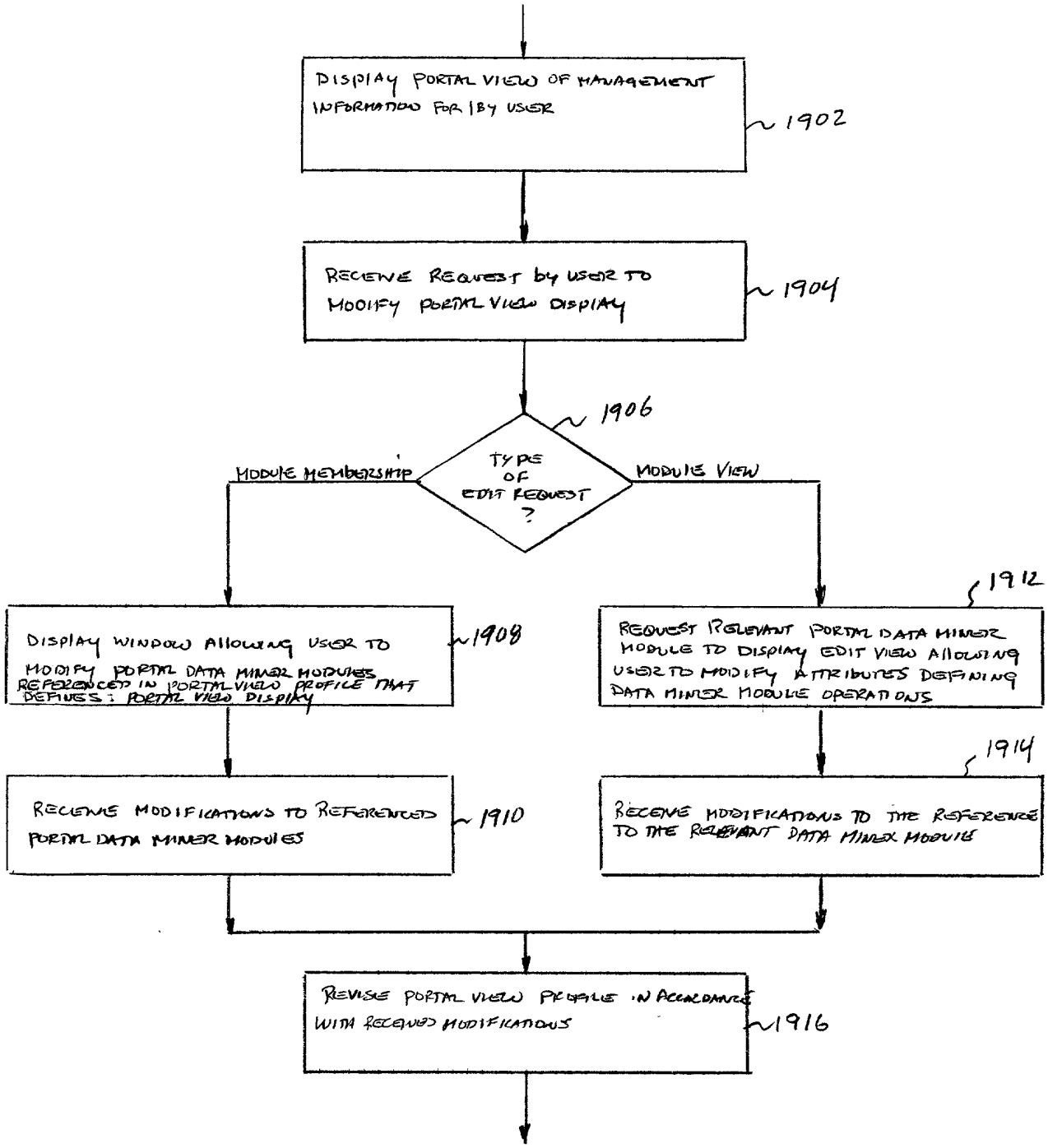

DISPLAY PORTAL VIEW OF MANAGEMENT INFORMATION FOR/BY USER
1902
RECEIVE REQUEST by USER TO MODIFY PORTAL VIEW DISPLAY
1904
1906
TYPE OF EDIT REQUEST ?
MODULE MEMBERSHIP
MODULE VIEW
DISPLAY WINDOW ALLOWING USER TO MODIFY PORTAL DATA MINER MODULES REFERENCED IN PORTAL VIEW PROFILE THAT DEFINES PORTAL VIEW DISPLAY
1908
1912
REQUEST RELEVANT PORTAL DATA MINER MODULE TO DISPLAY EDIT VIEW ALLOWING USER TO MODIFY ATTRIBUTES DEFINING DATA MINER MODULE OPERATIONS
1914
RECEIVE MODIFICATIONS TO REFERENCED PORTAL DATA MINER MODULES
1910
RECEIVE MODIFICATIONS TO THE REFERENCE TO THE RELEVANT DATA MINER MODULE
REVISE PORTAL VIEW PROFILE IN ACCORDANCE WITH RECEIVED MODIFICATIONS
1916

FIGURE 19